| •   |  |  |                            |
|---|--|--|----------------------------|
|   | Application No.  | Applicant(s)   |                            |
|   | 10/776,620   | CURRY ET AL.   |                            |
| Notice of Allowability  | Examiner   | Art Unit   |                            |
|   | Jayesh A. Patel  | 2624   |                            |
| The MAILING DATE of this communica All claims being allowable, PROSECUTION ON THE MI herewith (or previously mailed), a Notice of Allowance (I NOTICE OF ALLOWABILITY IS NOT A GRANT OF PA of the Office or upon petition by the applicant. See 37 C  | ERITS IS (OR REMAINS) CLOSI<br>PTOL-85) or other appropriate co<br>ATENT RIGHTS. This application      | ED in this application. If not include mmunication will be mailed in due | led<br>course. <b>THIS</b> |
| 1. $\boxtimes$ This communication is responsive to $\underline{08/02/2007}$   |  |  |                            |
| 2.  The allowed claim(s) is/are <u>1,5-7,11-13,17,18 and</u>  | <u>d 20-22</u> .   | ·  | •                          |
| <ul> <li>3. ☐ Acknowledgment is made of a claim for foreign</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the</li> <li>1. ☐ Certified copies of the priority docum</li> <li>2. ☐ Certified copies of the priority docum</li> <li>3. ☐ Copies of the certified copies of the priority docum</li> </ul> | e:<br>ents have been received.<br>ents have been received in Appli<br>priority documents have been rec | cation No  | ation from the             |
| International Bureau (PCT Rule 17.2  * Certified copies not received:   | (a)).  |  |                            |
| Applicant has THREE MONTHS FROM THE "MAILIN noted below. Failure to timely comply will result in AB THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  | ANDONMENT of this application  |  | equirements                |
| 4. A SUBSTITUTE OATH OR DECLARATION musinformal patent application (PTO-152)  |  |  | NOTICE OF                  |
| 5. CORRECTED DRAWINGS ( as "replacement she   | eets") must be submitted.  |  |                            |
| (a) [ including changes required by the Notice of   | Draftsperson's Patent Drawing Ro   | eview ( PTO-948) attached  |                            |
| 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Da  | ate  |  |                            |
| (b) ☐ including changes required by the attached the Paper No./Mail Date  | Examiner's Amendment / Comme   | ent or in the Office action of   |                            |
| Identifying indicia such as the application number (see each sheet. Replacement sheet(s) should be labeled as   |  |  | e back) of                 |
| 6. DEPOSIT OF and/or INFORMATION about attached Examiner's comment regarding REQUII   |  |  | Note the                   |
|   |  |  |                            |
| Attachment(s)   | - <b>-</b>   |  |                            |
| 1. Notice of References Cited (PTO-892)   | <u> </u>   | of Informal Patent Application   |                            |
| 2. Notice of Draftperson's Patent Drawing Review (P   |  | ew Summary (PTO-413),<br>No./Mail Date                                   |                            |
| <ul> <li>3. ☑ Information Disclosure Statements (PTO/SB/08),         Paper No./Mail Date (2000) (2000) (2000) (2000)</li> <li>4. ☐ Examiner's Comment Regarding Requirement for of Biological Material</li> </ul>   | 2004 JP 7. ☐ Examin  | it 8. 🗵 Examiner's Statement of Reasons for Allowance                    |                            |
|   | PERVISORY PATENT EXAM  | INER   | )                          |
| U.S. Patent and Trademark Office<br>PTOL-37 (Rev. 08-06)  | Notice of Altowability   | Part of Paper No.  | /Mail Date 20070829        |

Application/Control Number: 10/776,620

Art Unit: 2624

## Reasons for Allowance

1. Independent claims 1,7 and 13 are allowable over the closest prior arts Berkner et al. (US 20040146199) and Siegel et al (US 20050063615). Regarding Claims 1 for example Berkner discloses a method for generating a thumbnail image by discarding data of a portion of lines of an original image of an original document; and combining data not discarded to generate the thumbnail image corresponding to the original image. Berkner also discloses the X and Y pixel dimensions on page 4 and 5. Berkner however does not disclose identifying the portion of lines to be discarded based on a y position value and a y increment value; selecting pixels in lines not discarded that are within a neighborhood from a current x position value and an x size value; combining values of selected pixels to generate a value of a current pixel of the thumbnail image, including one or more pixels in a first neighborhood that are within a boundary corresponding to the current x position value and a position corresponding to a sum of the current x position value and the x size value; generating a next current x position value for a next pixel of the thumbnail image by: adding the x increment value to the current x position value corresponding to the current pixel of the thumbnail image, or adding the y increment value to a current y position value corresponding to the current pixel of the thumbnail image and setting the next current x position value to an x start value if a sum of the x increment value and the current x position value exceeds a line width value, or when an x count value

Page 2

Art Unit: 2624

of reduced size pixels exceeds an x count limit value, the x count value being a pixel number in a current line of the reduced size image; including pixels in a next neighborhood that are within a next boundary corresponding to the next current x position value for the next pixel of the thumbnail image and the next current x position value corresponding to a sum of the current x\_position value and the x size value; and using repeatedly a last pixel when positions corresponding to the sum of a value of the current x position value and the x size value exceed a position of a last pixel in a current line of the original image. Therefore Claim 1 is allowable over prior art. Claims 5 and 6 depend on Claim 1 and therefore they are allowable.

Claim 7 recites same limitations and therefore they are allowable. Claims
11 and 12 depend on Claim 7 and therefore they are allowable.

Regarding Independent Claim 13 Berkener and Siegel discloses an apparatus, comprising: an Interpolator; a position controller coupled to the interpolator. Berkner and Siegel however do not disclose one or more position values coupled to the position controller discarding all data in an original image of an original document spanned by a portion of first dimensions of a plurality of dimensions that span the original document by processing the position values to skip over discarded data, and the interpolator combining data not discarded to generate a reduced size image of the original image; first increment values; second increment values; the position values including first position values and second position values, wherein the position controller: identifies the portion of

Art Unit: 2624

the first dimensions based on the first position values and the first increment values; identifies the data not discarded based on the first position values, the first increment values, the second position values and the second increment values, each pair of the first position and increment values corresponding to one of first dimensions, each pair of the second position and increment values corresponding to one of second dimensions which are the plurality of dimensions other than the first dimensions; selects data points of the data not discarded that are within a neighborhood from a current position value corresponding to the first and second position values, and combines selected data points to generate a current data point of the reduced size image; size values, one size value corresponding to each of the second dimensions, wherein the position controller: includes one or more data points in a first neighborhood that are within a boundary corresponding to the current position value and a position value corresponding to a sum of the current position values and corresponding size values, generates next current position values for a next data point of the reduced size image by: adding the second increment values to the current position values corresponding to the current data point of the reduced size image in the second dimensions, or adding the first increment values to the current position values corresponding to the current data point of the reduced size image in the first dimensions and setting the next current position values in the second dimensions to start values corresponding to the second dimensions if a sum of the second increment values and the current position values exceeds width

Application/Control Number: 10/776,620 Page 5

Art Unit: 2624

values corresponding to any of the second dimensions, or when a count value in one of the second dimensions of reduced size pixels exceeds a corresponding count limit value, the count value being a next data point position in a current line of the reduced size image; and including data points in a next neighborhood that are within a next boundary corresponding to the next current position and a position value corresponding to a sum of the current position values and the corresponding size values; and the position controller using repeatedly respective last data points in any of the second dimensions by keeping the current position value at the last data points when position values corresponding to the sums of the current position values and the corresponding size values exceed position values of the last data points in respective dimensions in the original. Therefore Claim 13 is allowable. Claims 17,18,20,21 and 22 are dependent on Claim 13 therefore they are allowable.

2.Claims 2-4,8-10,14-16,19 and 23-26 have been cancelled.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jayesh A. Patel whose telephone number is 571-270-1227. The examiner can normally be reached on M-F 7.00am to 4.30 pm (5-4-9). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax

Application/Control Number: 10/776,620

Art Unit: 2624

Page 6

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jayesh Patel 08/29/07

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